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Application Serial Number: Source: Date Processed by STIC:	09/686	,234	The states	
Source:	1638			
Date Processed by STIC:	5/16/	02		

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- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR GRESUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENGER, 703-808-2114

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAY, 700-803-7216
PATENTIN 2.1 e-mail help: patin21help@uspto.gov.or.phone 703-306-41119 (R-Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov.or.phone 703-306-41119 (R-Wax)

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Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
- Hand Carry directly to:
   U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
   Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
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Revised 01/29/2002



# Corrected Diskette Needed

1638

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/686,234

DATE: 05/16/2002 TIME: 10:52:27

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF3\05162002\1686234.raw

#### SEQUENCE LISTING

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2 (1) GENERAL INFORMATION:
             (i) APPLICANT: SOMMERVILLE, CHRIS
      5
                            SCHIEBLE, WOLF
            (ii) TITLE OF INVENTION: MODIFIED CELLULOSE SYNTHASE GENE
      6
                                      FROM ARABIDOPSIS THALIANA CONFERS HERBICIDE RESISTANCE
      7
      8
                                      TO PLANTS
           (iii) NUMBER OF SEQUENCES: 2
     10
            (iv) CORRESPONDENCE ADDRESS:
     12
                  (A) ADDRESSEE: PAUL A. GOTTLIEB, AGCTT
     13
     14
                                  DEPARTMENT OF ENERGY
                                 GC-62 (FORSTL) MS-6F-067
     15
                  (B) STREET: 1000 INDEPENDENCE AVE. S.W.
     16
                  (C) CITY: WASHINGTON, D.C.
     17
                  (F) ZIP: 20585
C--> 18
     20
             (V) COMPUTER READABLE FORM:
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(A) MEDIUM TYPE: FLOPPY DISK

(B) COMPUTER: IBM PC COMPATIBLE

(C) OPERATING SYSTEM: MS-DOS

(D) SOFTWARE: WORDPERFECT 8

(vi) CURRENT APPLICATION DATA:

C--> 27 (A) APPLICATION NUMBER: US/09/686,234 C--> 28

(B) FILING DATE: 11-Oct-2000

31 (viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: SMITH, BRADLEY

(B) REGISTRATION NUMBER: 334436

(C) REFERENCE/DOCKET NUMBER: S-93994

C--> 36 (ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: 630-252-2160

(B) TELEFAX: 630-252-2779

#### **ERRORED SEQUENCES**

21

22

23 24

26

32

33

34

37

38

- 43 (2) INFORMATION FOR SEQ ID NO: 1: (i) SEQUENCE CHARACTERISTICS: must specify sequence type, i.e., nucleic acid or ED amino acid - Per Sect. 1.823 (b) (2) (1) (B) of (A) LENGTH: 3563 NUCLEOTIDES 46 E--> 47 (B) TYPE: CDNA 48 (C) STRANDEDNÉSS, DOUBLE STRANDED 49 (D) TOPOLOGY: LIMEAR the Old Rules. W--> 52(ii) MOLECULE TYPE:
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1: 57
    - 1 atcccaagat tctcctcttc gtcttcctta taaactatct ctctgtagag aagaaagctt 59





RAW SEQUENCE LISTING DATE: 05/16/2002 PATENT APPLICATION: US/09/686,234 TIME: 10:52:27

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF3\05162002\1686234.raw

60 61 ggatccagat tgagagagat tcagagagcc acatcaccac actccatctt cagatctcat 61 121 gatttgaact attccgacgt ttcggtgttg gaagcaacta agtgacaaat ggaatccgaa 62 181 ggggaaaccg cgggaaagcc gatgaagaac attgttccgc agacttgcca gatctgtagt 63 241 gacaatgttg gcaagactgt tgatggagat cgttttgtgg cttgtgatat ttgttcattc 64 301 ccaqtttqtc qqccttqcta cqaqtatqaq aqqaaaqatq qqaatcaatc ttqtcctcaq 65 361 tgcaaaacca gatacaagag gctcaaaggt agtcctgcta ttcctggtga taaagacgag 421 gatggcttag ctgatgaagg tactgttgag ttcaactacc ctcagaagga gaaaatttca 66 481 gagcggatgc ttggttggca tcttactcgt gggaagggag aggaaatggg ggaaccccag 67 541 tatgataaag aggtetetea caateatett eetegtetea egageagaea agataettea 68 601 ggagagtttt ctgctgcctc acctgaacgc ctctctgtat cttctactat cgctggggga 69 661 aagcqccttc cctattcatc agatgtcaat caatcaccaa atagaaggat tgtggatcct 70 71 721 gttggactcg ggaatgtagc ttggaaggag agagttgatg gctggaaaat gaagcaagag 72 781 aagaatactg gtcctgtcag cacgcaggct gcttctgaaa gaggtggagt agatattgat 841 gccagcacag atatectage agatgagget etgetgaatg acgaagegag geageetetg 73 901 tcaaggaaag tttcaattcc ttcatcacgg atcaatcctt acagaatggt tattatgctg 74 75 961 eggettgtta teetttgtet ettettgeat taeegtataa caaacccagt gecaaatgee 76 1021 tttgctctat ggctggtctc tgtgatatgt gagatctggt ttgccttatc ctggattttg 77 1081 gatcagtttc ccaagtggtt tcctgtgaac cgtgaaacct acctcgacag gcttgcttta 78 1141 agatatqatc qtqaaqqtqa qccatcacaq ttagctqctq ttqacatttt cqtqaqtact 79 1201 gttgacccct tgaaggagcc accccttgtg acagccaaca cagtgctctc tattctggct 1261 gttgactacc cagttgacaa ggtgtcctgt tatgtttttg atgatggtgc tgctatgtta 80 1321 tcatttgaat cacttgcaga aacatcagag tttgctcgta aatgggtacc attttgcaag 81 82 1381 aaatatagca tagagcctcg tgcaccagaa tggtactttg ctgcgaaaat agattacttg 83 1441 aaggataaag ttcagacatc atttgtcaaa gatcgtagag ctatgaagag ggaatatgag 84 1501 gaatttaaaa toogaatcaa tgoacttgtt tooaaagcoo taaaatgtoo tgaagaaggg 85 1561 tgggttatgc aagatggcac accgtggcct ggaaataata caggggacca tccaggaatg 86 1621 atccapqtct tcttaqqqca aaatqqtqqa cttqatqcaq aqqqcaatqa qctcccqcqt 87 1681 ttggtatatg tttctcgaga aaagcgacca ggattccagc accacaaaaa ggctggtgct 1741 atgaatgcac tggtgagagt ttcagcagtt cttaccaatg gacctttcat cttgaatctt 88 89 1801 gattgtgatc attacataaa taacagcaaa gccttaagag aagcaatgtg cttcctgatg 90 1861 gacccaaacc tcgggaagca agtttgttat gttcagttcc cacaaagatt tgatggtatc 91 1921 gataagaacg atagatatge taategtaat accgtgttet ttgatattaa ettgagaggt 92 1981 ttagatqqga ttcaagqacc tqtatatqtc ggaactqgat gtqttttcaa caqaacaqca 93 2041 ttatacqqtt atgaacctcc aataaaaqta aaacacaaqa aqccaaqtct tttatctaaq 94 2101 ctctqtqqtq qatcaagaaa qaagaattcc aaagctaaga aagagtcqga caaaaagaaa 2161 tcaqqcaqqc atactqactc aactqttcct qtattcaacc tcqatqacat agaaqaqqqa 95 96 2221 gttgaaggtg ctggttttga tgatgaaaag gcgctcttaa tgtcgcaaat gagcctggag 97 2281 aagcgatttg gacagtctgc tgtttttgtt gcttctaccc taatggaaaa tggtggtgtt 98 2341 cctccttcag caactccaga aaaccttctc aaagaggcta tccatgtcat tagttgtggt 99 2401 tatgaggata agtcagattg gggaatggag attggatgga tctatggttc tgtgacagaa 100 2461 gatattctga ctgggttcaa aatgcatgcc cgtggatggc gatccattta ctgcatgcct 101 2521 aagcttccag ctttcaaggg ttctgctcct atcaatcttt cagatcgtct gaaccaagtg 102 2581 ctgaggtggg ctttaggttc agttgagatt ctcttcagtc ggcattgtcc tatatggtat 103 2641 ggttacaatg ggaggctaaa atttcttgag aggtttgcgt atgtgaacac caccatctac 104 2701 cctatcacct ccattcctct tctcatgtat tgtacattgc tagccgtttg tctcttcacc 105 2761 aaccagttta ttattcctca gattagtaac attgcaagta tatggtttct gtctctcttt 106 2821 ctctccattt tcgccacggg tatactagaa atgaggtgga gtggcgtagg catagacgaa 107 2881 tqqtqqaqaa acqaqcaqtt ttqqqtcatt qqtqqaqtat ccqctcattt attcqctqtq 108 2941 tttcaaggta tcctcaaagt ccttgccggt attgacacaa acttcacagt tatctcaaaa





## RAW SEQUENCE LISTING DATE: 05/16/2002 PATENT APPLICATION: US/09/686,234 TIME: 10:52:27

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF3\05162002\1686234.raw

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     111
              3121 gctatcaaca gtggatacca atcatgggga ccactctttg gtaagttgtt ctttgccttc
              3181 tgggtgattg ttcacttgta ccctttcctc aagggtttga tgggtcgaca gaaccggact
     112
              3241 cetaccattg ttgtggtctg gtctgttctc ttggcttcta tcttctcqtt gttgtgggtt
     113
              3301 aggattgate cetteactag eegagteact ggeeeggaca ttetggaatg tggaateaac
     114
     115
              3361 tgttgagaag cgagcaaata tttacctgtt ttgagggtta aaaaaaacac agaatttaaa
              3421 ttatttttca ttgttttatt tgttcacttt tttacttttg ttgtgtgtat ctgtctgttc
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              3481 qttcttctqt cttqqtqtca taaatttatq tqtaqaatat atcttactct agttactttq
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     125
E--> 126
                   (B) TYPE: CDNA
     127
                   (C) STRANDEDNESS: DOUBLE STRANDED
     128
                   (D) TOPOLOGY: LINEAR
             (ii) MOLECULE TYPE: 🗸
W--> 130
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     136
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    159
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    161
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    162
             1681 ttgqtatatq tttctcqaqa aaaqcqacca qqattccaqc accacaaaaa qqctqqtqct
    163
             1741 atgaatgcac tggtgagagt ttcagcagtt cttaccaatg gacctttcat cttgaatctt
    164
             1801 gattgtgatc attacataaa taacagcaaa gccttaagag aagcaatgtg cttcctgatg
```





DATE: 05/16/2002 TIME: 10:52:27 RAW SEQUENCE LISTING PATENT APPLICATION: US/09/686,234

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF3\05162002\1686234.raw

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167			ttcaaggacc	-			-
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169			gatcaagaaa	-			-
170	2161	tcaggcaggc	atactgactc	aactgttcct	gtattcaacc	tcgatgacat	agaagaggga
171	2221	gttgaaggtg	ctggttttga	tgatgaaaag	gcgctcttaa	tgtcgcaaat	gagcctggag
172	2281	aagcgatttg	gacagtctgc	tgtttttgtt	gcttctaccc	taatggaaaa	tggtggtgtt
173	2341	cctccttcag	caactccaga	aaaccttctc	aaagaggcta	tccatgtcat	tagttgtggt
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175	2461	gatattctga	ctgggttcaa	aatgcatgcc	cgtggatggc	gatccattta	ctgcatgcct
176	2521	aagcttccag	ctttcaaggg	ttctgctcct	atcaatcttt	cagatcgtct	gaaccaagtg
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178	2641	ggttacaatg	ggaggctaaa	atttcttgag	aggtttgcgt	atgtgaacac	caccatctac
179	2701	cctatcacct	ccattcctct	tctcatgtat	tgtacattgc	tagccgtttg	tctcttcacc
181	2761	aaccagttta	ttattcctca	gattagtaac	attgcaagta	tatggtttct	gtctctcttt
182	2821	ctctccattt	tcgccacggg	tatactagaa	atgaggtgga	gtggcgtagg	catagacgaa
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187	3121	gctatcaaca	gtggatacca	atcatgggga	ccactctttg	ataagttgtt	ctttgccttc
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193			cttggtgtca				
194			attaaagtga		-		_





DATE: 05/16/2002

### VERIFICATION SUMMARY

PATENT APPLICATION: US/09/686,234 TIME: 10:52:28

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF3\05162002\1686234.raw

L:18 M:220 C: Keyword misspelled or invalid format, [(F) ZIP:]

L:27 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]

L:28 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]

L:36 M:220 C: Keyword misspelled or invalid format, [(ix) TELECOMMUNICATION INFORMATION:]

L:52 M:220 C: Keyword misspelled or invalid format, [(ii) MOLECULE TYPE:]

L:46 M:241 E: Invalid Alpha Header Field, [TYPE:], SeqNo=1

L:52 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=1

L:125 M:241 E: Invalid Alpha Header Field, [TYPE:], SeqNo=2

L:130 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=2